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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,242	12/15/2003	Robert Tolles	007471/CMP/CMP	3149
41161	7590	01/05/2006	EXAMINER	
DUGAN & DUGAN, PC 55 SOUTH BROADWAY TARRYTOWN, NY 10591			CHAUDHRY, SAEED T	
			ART UNIT	PAPER NUMBER
			1746	
DATE MAILED: 01/05/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/736,242	<b>Applicant(s)</b> TOLLES ET AL.	
	<b>Examiner</b> Saeed T. Chaudhry	<b>Art Unit</b> 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 9-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/23/04</u> . | 6) <input type="checkbox"/> Other: ____  |

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## **DETAILED ACTION**

### **Election/Restriction**

Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I, Claims 1-8, drawn to an apparatus comprising a tank; at least one support; a transducer; a reflector, classified in Class 134, subclass 184.

Group II, Claims 9-18, drawn to a method of cleaning a substrate, classified in Class 134, subclass 1.

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (M.P.E.P. § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as mixing fluids in a tank or storing liquid in a tank.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, have acquired a separate status in the art because of their recognized divergent subject matter, the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Robert W. Mulcahy on December 15, 2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-8. Affirmation of this election must be made by applicant in responding to this Office action. Claims 9-18 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention.

### **Joint Inventors**

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the

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currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) he has abandoned the invention.

(d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

(f) he did not himself invent the subject matter sought to be patented.

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

**Claims 1-2 and 4 are rejected under 35 U.S.C. § 102(b) as being anticipated by**

**Ohmori et al.**

Ohmori et al (5,379,785) disclose an apparatus having a tank for holding liquid; at least one support component in the tank (21a; 21b) for holding a substrate; a transducer (7a; 7b) adapted to output sonic energy into the liquid (19) a reflector (2c; 2d or 2c;2f) positioned at a side of the substrate (4) and does not obstruct a path of for the substrate to be load or unload (see Figs. 7-10 and col. 3, line 50 through col. 4, line 61). The ultrasonic energy reflected from the

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reflectors also pass through the edges of the substrate (see fig. 9). Ohmori et al disclose all the apparatus limitations as claimed herein. Therefore, Ohmori et al anticipated the claimed apparatus.

**Claims 1-2 and 4 are rejected under 35 U.S.C. § 102(b) as being anticipated by Sato et al.**

Sato et al (6,026,832) disclose an apparatus having a tank for holding liquid (5); at least one support component in the tank (28a; 28b) for holding a substrate; a transducer (23a; 23b or 63) adapted to output sonic energy into the liquid (6) reflectors (24a; 24b or 64) positioned at a side of the substrate (4) and does not obstruct a path of for the substrate to be load or unload (see Figs. 4, 10 and col. 3, lines 34-48, col. 5, line 58 through col. 6, line 51). The ultrasonic energy reflected from the reflector, inherently pass through the edges of the substrate.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

The factual inquiries set forth in *Graham v. John Deere Co.*, 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or unobviousness.

**Claims 5-6 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohmori et al or Sato et al in view of Bran.**

Ohmori et al and Sato et al were discussed supra. However, the reference fails to disclose a plurality of rollers adapted to support the substrate.

Bran (5,090,432) disclose an apparatus having a plurality of rollers for supporting a substrate in a tank, wherein roller (200) rotates the substrate (10) and a transducer (32) produces sonic energy at the bottom of the tank (see Fig. 7 and col. 8, lines 18-45).

It would have been obvious at the time applicant invented the claimed apparatus to include rollers as disclosed by Bran into the apparatus of Ohmori et al or Sato et al for the purpose of uniform cleaning of the substrate. Further, it would have been obvious to change the location of the parts such as changing the location of the transducer from side of the tank in the apparatus's of Ohmori et al and Sato et al to the bottom of the tank since the reflectors would reflect the sonic energy toward the substrate (see *In re Japikse*, 86 USPQ 70 (CCPA 1950)).

**Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohmori et al or Sato et al as applied to claim 1 above, and further in view of Fishkin et al.**

Ohmori et al and Sato et al were discussed supra. However, the reference fails to disclose that the reflector is curved.

Fishkin et al (6,311,702) disclose an apparatus having curved reflectors (15) for focusing the ultrasonic energy at one point (see Fig. 3 and col. 6, lines 12-32).

It would have been obvious at the time applicant invented the claimed apparatus to include a curved reflector as disclosed by Fishkin et al into the apparatus's of Ohmori et al or Sato et al for focusing the ultrasonic energy at one point such as edged of the substrate.

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**Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohmori et al or Sato et al in view of Bran as applied to claim 5 above, and further in view of Fishkin et al.**

Ohmori et al and Sato et al were discussed supra. However, the reference fails to disclose that the reflector is curved.

Fishkin et al (6,311,702) disclose an apparatus having curved reflectors (15) for focusing the ultrasonic energy at one point (see Fig. 3 and col. 6, lines 12-32).

It would have been obvious at the time applicant invented the claimed apparatus to include a curved reflector as disclosed by Fishkin et al into the apparatus's of Ohmori et al or Sato et al for focusing the ultrasonic energy at one point such as edged of the substrate.

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (571) 272-1298. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 4:00 P.M.*

*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Barr, can be reached on (571)-272-1414. The fax phone number for non-final is (703)-872-9306.*

*When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.*

*Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1700.*

*Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).*

**Saeed T. Chaudhry**  
Patent Examiner



**MICHAEL BARR**  
SUPERVISORY PATENT EXAMINER